WHAT IS CLAIMED IS:

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- 1. A semiconductor fabricating apparatus having a resonant frequency sensor disposed in a processing chamber, wherein a change in the resonant frequency of said resonant frequency sensor is detected in order to determine the maintenance timing.
- 2. A semiconductor fabricating apparatus according to Claim 1, wherein said resonant frequency sensor is fabricated as a micro machine.
- 3. A semiconductor fabricating apparatus according to Claim 1, wherein: the relationship between an amount of etching or deposition and chamber condition at a predetermined position in said processing chamber is stored in a database; the change in the resonant frequency is compared with associated data recorded in said database in order to determine the maintenance timing.